Return on Investment (ROI) Program Funding Application

This template was built using the ITD ROI Submission Intranet application.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform post implementation outcome audits for all Pooled Technology funded projects and may perform audits on other projects.

This is a Pooled Technology Fund Request. Amount of funding requested: $1,200,000.00

Section I: Proposal

Date:	7/14/2004
Agency Name:	DOC - Central Office
Project Name:	ICON - Iowa Corrections Offender Network
Agency Manager:	John Baldwin
Agency Manager Phone Number / E-Mail:	(515)242-5704 / john.baldwin@doc.state.ia.us
Executive Sponsor (Agency Director or Designee): Gary Maynard	

A. Project Summary

Describe the nature and use of the proposed project, including what is to be accomplished, how it will be accomplished, and what the costs and benefits will be.
Response:

Staff within the Department of Corrections will have real time information required to deal effectively with offenders. The ability to track offenders, treatment plans, transfers, work assignments, medical treatment and other offender data will greatly enhance work process and reduce duplicate data entry. Iowa Corrections Offender Network (ICON) data is critical to information loaded on the Enterprise Data Warehouse and will be the cornerstone of the Criminal Justice Information Systems Integration (CJIS) project. Multiple justice agencies will have the opportunity to access some of the data in a secure environment. The ICON data from the Enterprise Data Warehouse is used to create annual statistical reports which is reducing staff time required to generate the reports by hundreds of hours. Additionally, linking ICON data and Court data resulted in a staff time savings of $62K annually for restitution reporting alone. This is for CBC staff time and does not include the Court staff time required to gather and pass the data to CBC.

B. Strategic Plan

How does the proposed project fit into the strategic plan of the requesting agency?
Response:

The project is consistent and a critical component of the State Strategic Plan for Safe Communities, the Governor's initiative for sharing criminal justice data, and Homeland Security. The ICON system is and will be a key component of the newly created, by the Governor and Chief Justice, the criminal justice information sharing system that wlil share data across Iowa.

C. Current Technology

Provide a summary of the technology used by the current system. How does the proposed project impact

the agency's technological direction?
Response:

Application software Client side: Internet explorer version 5 Server side: Microsoft SQL version 2000
Operating system software Client side: Windows 95, 98, 2000 or NT Servers side: Windows 2000
advanced server Mid-Range: Windows 2000 advanced server Interfaces to other systems: Identify
important or major interfaces to internal and external systems ICBC interface: Text file transfer/FTP Court
interface: Oracle Public Safety: Oracle Data Warehouse: Terra Data

D. Statutory or Other Requirements

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?
☐ YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is
impacted by it.)
Explanation:
NA

Is this project or expenditure required by state law, rule or order?
☑ YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is
impacted by it.)
Explanation:
Language contained in HF 530 PLEASE NOTE WITHOUT FUNDING IN FY06 THE DEPARTMENT OF
CORRECTIONS WILL NOT HAVE A FUNCTIONAL COMPUTER SYSTEM.

Does this project or expenditure meet a health, safety or security requirement?
☑ YES (If "YES", explain.)
Explanation:
The project meets all health, safety, and security requirements for DOC. ICON will allow all employees to
have complete information on all 55,000 offenders we supervise. These requirements are defined in code
and policy and are available for your review.

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☑ YES (If "YES", cite the specific standard.)
Explanation:
The Department is striving to reach all standards: database, operating system, and web-based
technology.

Evaluation (20 Points Maximum)
If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-20 points awarded.

E. Impact on Iowa's Citizens

a. Project Participants

List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.
Response:

The primary stakeholders are the Governor, Legislature, Director of Corrections, Corrections' staff, who will have accurate data with which to implement or redirect programs and staff to achieve the overall goal of safe communities. This is crucial so that communities are safe and that corrections resources can be invested wisely without waste. The nature of participants responsibilities are to provide input, review, and overall mission statements.
- An equally important stakeholder is the offender that is under our supervision. These offenders deserve a chance at success in life and not endless opportunities to see the inside of a jail or prison.
- The staff of all public safety agencies need to know accurate and up to date information on the person they are dealing with.
- The general public needs to live in safe communities.
- Legislatures and policy makers need to know what works, what doesn't and how to make improvements.

b. Service Improvements

Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.
Response:

Staff within the Department of Corrections will have real time information required to deal effectively with offenders. The ability to track offenders, treatment plans, transfers, work assignments, medical treatment and other offnder data will greatly enhance work process and reduce duplicate data entry. Iowa Corrections Offender Network (ICON) data is critical to information loaded on the Enterprise Data

Warehouse and will be the cornerstone of the Criminal Justice Information Systems Integration (CJIS) project. Multiple justice agencies will have the opportunity to access some of the data in a secure environment. The ICON data from the Enterprise Data Warehouse is used to create annual statistical reports which is reducing staff time required to generate the reports by hundreds of hours. Additionally, linking ICON data and Court data resulted in a staff time savings of $62K annually for restitution reporting alone. This is for CBC staff time and does not include the Court staff time required to gather and pass the data to CBC. The ICON system provides real-time offender informatino to correctional officers.

c. Citizen Impact

Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adopted rate of Iowa's citizens or government employees with the preceding project?
Response:

The ICON-Mercury system provides massive tangible and intangible benefits to Iowa citizens and government employees. A partial list of benefits follows.
1. The ICON system saves lives.
2. Provides for immediate information on all convicted felons in Iowa.
3. Allows front line institutional staff to have access to relevant information about the inmate they are dealing with.
4. Provides medical information to all medical, dental, and nursing staff.
5. Provides pharmacy formulary and drug interaction system to greatly reduce costs and negative medical reactions.
6. Makes the counting of inmates easier.
7. Determining which offender programs keep offenders from recidivating.
8. Provides for assessing the offenders needs with targeted diversion programs.
9. Tracks the offender through the various assigned programs. Allows the Department to provide services at the appropriate level.
10. Shares data with other agencies to avoid duplication of effort.
11. Provides for public safety through knowledge of the offender's actions.
12. Provides public information for such offense as sexual assault.
13. Complies with Governor's and legislative language that DOC develop ICON to be used by public safety agencies.
14. Greatly improves work process by moving from a paper and pencil system to a totally automated one.
15. Enhances the State of Iowa Code requirement for a criminal sanction continuum.
16. Allows for accurate computer projection of inmate offender population.

d. Public Health and/or Safety

Explain requirements or impact on the health and safety of the public.
Response:
The project meets all health, safety, and security requirements for DOC. ICON will allow all employees to have complete information on all 55,000 offenders we supervise. These requirements are defined in code and policy and are available for your review.
The Department is striving to reach all standards: database, operating system, and web based

technology.

Evaluation (10 Points Maximum)

- Minimally improves Customer Service (0-3 points).
- Moderately improves Customer Service (4-6 points).
- Significantly improves Customer Service (7-10 points).

Evaluation (15 Points Maximum)

- Minimally directly impacts Iowa citizens (0-5 points).
- Moderately directly impacts Iowa citizens (6-10 points).
- Significantly directly impacts Iowa citizens (11-15 points).

F. Process Reengineering

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.
Response:
Pre-project: The ICON-Mercury system replaces the Adult Corrections Data System (ACDS) mainframe data base with a web based application that dramatically impacts the correctional officer, warden, medical staff, dietary, central office, judges, public safety officials, and a host of related agencies. The ACDS system which is over 25 years old does not provide the end users with data required to evaluate treatment or program effectiveness. The ACDS data could not be linked to any data from the Community Based Corrections (CBC) parole and probation side of DOC. ACDS is unable provide decision-makers, Governor, Legislature, judges, and executive staff with statistical information to make crucial public safety decisions. Basically, public safety agencies, judges, and policy makers do not know what works and what doesn't for over 8,000 incarcerated felons. This project does make use of information technology to reengineer both an out of date data system as well as improving governmental processes.

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens will interact with the proposed system. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.
Response:
Post-project: The ICON prison data is being linked to the ICON Community Based Corrections data. This was impossible before ICON will allow public safety agencies, judges, and policy makers to know what works and what does not work with Iowa's rapidly expanding prison population. The ICON data is being used to link data from the Iowa Court Information System (ICIS) and a pilot to link ICON data to Polk

County jail data is underway. The institutions and the Community Based Corrections (CBC) districts are re-engineering process to capture data at point of contact instead of duplicationg data entry in multiple places. Relying on integrated ICON data from the prisons, community based corrections and the jails will be a significant change in the way data is captured and utilized and evaluated.

[This section to be scored by application evaluator.]

<u>Evaluation</u> **(10 Points Maximum)**

- <u>Minimal</u> use of information technology to reengineer government processes (0-3 points).
- <u>Moderate</u> use of information technology to reengineer government processes (4-6 points).
- <u>Significant </u>use of information technology to reengineer government processes (7-10).

G. Timeline

Provide a projected timeline for this project. Include such items as planning, database design, coding, implementation, testing, conversion, parallel installation, and date of final release. Also include the parties responsible for each item.

Response:

ICON-Mercury is scheduled for completion during FY 2006. Immediatley thereafter, work will begin on updating ICON-Lite. This system replaces ACDS on the mainframe. The responsible parties are the software vendor, Advanced Technologies Group (ATG) and the staff of the Iowa Department of Corrections. The staff of Corrections are represented by two user groups - one for Community-Based Corrections and the other for Institutions. Check points are monthly.

[This section to be scored by application evaluator.]

<u>Evaluation</u> **(5 Points Maximum)**

- The timeline contains several problem areas (0-2 points)
- The timeline seems reasonable with few problem areas (3-4 points)
- The timeline seems reasonable with no problem areas (5)

H. Funding Requirements

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades, ...

	FY06		FY07		FY08	
	Cost($)	% Total Cost	Cost($)	% Total Cost	Cost($)	% Total Cost
State General Fund	$0	0%	$0	0%	$0	0%
Pooled Tech. Fund /IowAccess Fund	$1,200,000	100%	$790,000	100%	$790,000	100%
Federal Funds	$0	0%	$0	0%	$0	0%
Local Gov. Funds	$0	0%	$0	0%	$0	0%

Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$0	0%	$0	0%	$0	0%
Total Project Cost	$1,200,000	100%	$790,000	100%	$790,000	100%
Non-Pooled Tech. Total	$0	0%	$0	0%	$0	0%

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- The funding request contains questionable items (0-3 points)
- The funding request seems reasonable with few questionable items (4-6 points)
- The funding request seems reasonable with no problem areas (7-10)

I. Scope

Is this project the first part of a future, larger project?

☑ YES (If "YES", explain.) ☐ NO, it is a stand-alone project.

Explanation:
The U.S. Department of Justice has a major initiative in process dealing with the integration of criminal justice information systems at the state level. This initiative in Iowa is named the Criminal Justice Information Systems Integration Project (CJIS) and the ICON data is the cornerstone of the project.

Is this project a continuation of a previously begun project?

☑ YES (If "YES", explain.)

Explanation:
The DOC has created the ICON Lite (Community-Based Corrections) data system. ICON Mercury is intended to integrate prison data into the original CBC system which is mostly community based parole and probation offender information.

J. Source of Funds

On a fiscal year basis, how much of the total project cost ($ amount and %) would be <u>absorbed</u> by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.

Response:
0% in FY 2006 and FY 2007

[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)

Section II: Financial Analysis

A. Project Budget Table

It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right) \times \%\ State\ Share\right] + \left(Annual\ Ongoing\ Cost \times \%\ State\ Share\right) = Annual\ Prorated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$0	1	0.00%	$0	0.00%	$0
Software	$0	4	0.00%	$0	0.00%	$0
Hardware	$0	3	0.00%	$0	0.00%	$0
Training	$0	4	0.00%	$0	0.00%	$0
Facilities	$0	1	0.00%	$0	0.00%	$0
Professional Services	$1,200,000	4	100.00%	$200,000	100.00%	$500,000
ITD Services	$0	4	0.00%	$0	0.00%	$0
Supplies, Maint, etc.	$0	1	0.00%	$0	0.00%	$0
Other	$0	1	0.00%	$0	0.00%	$0
Totals	$1,200,000	---	---	$200,000	---	$500,000

B. Spending Plan

Explain how the funds will be allocated.

Response:

C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

1. Annual Pre-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process <u>prior to</u> project implementation.
Describe Annual Pre-Project Cost:
This project is to avoid cost increases. Data will be shared with the Governor, Legislature, the Courts, Department of Public Safety, CJJP, County Attorneys, sheriffs, and police.

Quantify Annual Pre-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Pre-Project Cost:	$0.00

2. Annual Post-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process <u>after</u> project implementation.
Describe Annual Post-Project Cost:
$0

Quantify Annual Post-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Post-Project Cost:	$0.00

3. Citizen Benefit - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time.

Describe savings justification:

Transaction Savings
Number of annual online transactions: 0

Hours saved/transaction:	0
Number of Citizens affected:	0
Value of Citizen Hour	0
Total Transaction Savings:	$0
Other Savings (Describe)	$0
Total Savings:	**$0**

4. Opportunity Value/Risk or Loss avoidance - Quantify the estimated annual <u>non-operations </u>benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:
In 1988, the Iowa prison population was 3000. In 1996, prison population was 6000. In 2002, prison population is 8150. Prison population is currently predicted to increase 60% over the next 10 years. That would bring the predicted total to over 12,800. Due to the State's budget problems, staff at the DOC was reduced from 4233 to 3871 in 2002. DOC will use the ICON data based system to manage offenders, focus treatment and improve program outcomes. The cost avoidance of building one additional prison at an estimated cost of $35 million to house 400 inmates is an attainable goal.
RESPONSE: Other Savings (describeIn 1988, the Iowa prison population was 3000. In 1996, prison population was 6000. In 2002, prison population is 8150. Prison population is currently predicted to increase 60% over the next 10 years. That would bring the predicted total to over 12,800. Due to the State's budget problems, staff at the DOC was reduced from 4233 to 3871 in 2002. DOC will use the ICON data based system to manage offenders, focus treatment and improve program outcomes. The cost avoidance of building one additional prison at an estimated cost of $35 million to house 400 inmates is an attainable goal. Additionally, populating the prison data from the data already entered into the CBC side of the system would save ½ per day of data entry per 400 staff people annually. This equals $72,800 annually.Utilizing the ICON prison data to create adhoc and management statistical reports will avoid the lengthy calculation and gathering of data from multiple sources and is estimated to avoid 8-10 hours per week for 89 employees. That is a time avoidance of an estimated 40,000 hours that can be devoted to offender management instead of data gathering and programming. This equals $1.4 million annually.$35,000,000 cost avoidance of building a new prison$ 1,400,000 cost avoidance of manually gathering and preparing reports$ 72,800 cost avoidance of duplicate data entry
$ 36,472,800

5. Benefits Not Readily Quantifiable - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).
Response:
ICON will launch the Department into new technology moving from an outdated mainframe system to a Web browser based system. Using a Web browser based system will result in the decrease in the cost of hardware. There will be no need for dedicated database servers at each location resulting in a saving statewide.
This technology requires fewer IT staff for initial deployment and ongoing technical support than would be needed with a distributed database.
The system utilizes the Iowa Communications Network as the "backbone" of the system, which maximizes our use of the ICN as a state resource and is consistent with other agency architecture.
Movement to this technology places the Department in a position where we are poised to take advantage of emerging technology.
ICON will greatly enhance communication within Corrections as well as between corrections and other agencies. This will allow for the real time exchange of information, which is something that has not previously been possible. The same is true as extended to the general public.
Corrections (CBC and Institutions) will now have one offender database in which to store information. This

information will be available to all staff and will be recorded in a consistent format understood by all users.

Plans are underway to connect Corrections, the Department of Public Safety and the Court system so that pertinent information is shared in a timely fashion.
The new technology will allow better inter and inter-agency communication resulting in more complete and consistent offender information from throughout the criminal justice system in Iowa.
The ICON technology will allow the transfer of public information to the Iowa Access Project resulting in the public having access to the data they have a right to view

ROI Financial Worksheet	
A. Total Annual Pre-Project cost (State Share from Section II C1):	$0
B. Total Annual Post-Project cost (State Share from Section II C2):	$0
State Government Benefit (= A-B):	$0
Annual Benefit Summary:	$0
State Government Benefit:	$0
Citizen Benefit:	$0
Opportunity Value or Risk/Loss Avoidance Benefit:	$36,472,800
C. Total Annual Project Benefit:	$36,472,800
D. Annual Prorated Cost (From Budget Table):	$500,000
Benefit / Cost Ratio: (C/D) =	72.95
Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =	2,997.73%

[This section to be scored by application evaluator.]
<u>Evaluation</u> **(25 Points Maximum)**

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-8 points).
- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (9-16 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (17-25).

Note: For projects where no State Government Benefit, Citizen Benefit, or Opportunity Value or Risk/Loss Avoidance Benefit is created due to the nature of the project, the Benefit/Cost Ratio and Return on Investment values are set to Zero.

Appendix A. Auditable Outcome Measures

For each of the following categories, <u>list the auditable metrics for success </u>after implementation and <u>identify how they will be measured.</u>

1. Improved customer service
1. All annual statistical data reports will be generated using ICON data and the Data Warehouse. 2. The ICON system will be web browser based and will result in an integrated offender data base. Staff will avoid duplicate and triplicate data entry by utilizing an integrated offender based system instead of three distinct systems that ICON is replacing. Offenders will have a better chance at success after their incarceration if they have a focused treatment plan that prepares them for release. AUDITABLE MEASURES: Number on parole, number on probation, number in prison, victims, improved sex offender

registry notification, decrease in medical lawsuits, decreased offender processing time, overtime, decrease recidivism rates, treatment program improvements, and a host of others.

2. Citizen impact

The DOC will be in a position to supervise offenders more effectively. By managing treatment and program interventions for offenders recidivism will be reduced. AUDITABLE MEASURES: Number on parole, number on probation, number in prison, victims, improved sex offender registry notification, decrease in medical lawsuits, decreased offender processing time, overtime, decrease recidivism rates, treatment program improvements, and a host of others.

3. Cost Savings

1. The need for dedicated database servers at each location will be reduced. 2. Staff time gathering data and preparing reports will be significantly reduced. This cost avoidance is estimated at $1.4 million annually in staff time.

4. Project reengineering

ICON data will be shared real time with DPS and Polk County. This is a revolutionary change in process.

5. Source of funds (Budget %)

No response required.

6. Tangible/Intangible benefits

The ICON system will enhance our ability to measure correctional outcomes. Functioning with one database will give us the ability to centrally generate statistical reports which will be more efficient, accurate and timely than the current method of sending out surveys, completing file reviews, etc. Through our ability to feed information to the data warehouse and through enhanced reporting capabilities, we can significantly improve the Criminal and Juvenile Justice Planning Agency's ability to analyze and evaluate criminal justice information statewide. Through the improved report capabilities of ICON, Corrections will be able to more readily and accurately respond to legislative inquires.